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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/568,777

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RONALD L. SMITH

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TEXAS INSTRUMENTS INCORPORATED

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DALLAS, TX 75265

EXAMINER

MYERS, PAUL R

ART UNIT

PAPER NUMBER

2112

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 08/568,777	Applicant(s) SMITH ET AL.	
	Examiner Paul R. Myers	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,21 and 24-27 is/are allowed.
- 6) ☒ Claim(s) 15-19, 22-23, 28, 30-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/24/06 have been fully considered but they are not persuasive.

In regards to applicants argument that the prior art is Sainton individually and Morris individually not the combination of Sainton and Morris as suggested by the examiner. The examiner stated that the **rejection** was over the combination of Sainton and Morris not over Sainton individually and Morris individually. The examiner agrees the prior art is Sainton and Morris however the rejection is over the combination of Sainton and Morris. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In regards to applicants tutorial regarding the Graham v. John Deere Co. analysis. The applicants are correct. However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In regards to applicants argument that Sainton clearly discloses in Figure 3 that the connector (112) of modem (10) in computer (104) is coupled via a 3FT black round cable: The examiner agrees. However, the rejection is Sainton in view of Morris, and Morris teaches connecting without a cable or tether.

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In regards to applicants argument that Morris expressly teaches that the battery pack has been removed. The examiner agrees. However the rejection is Sainton in view of Morris. Sainton expressly teaches both the computer and the telephone have a battery (Column 2 lines 45-64). The examiner sees no reason a battery could not be included in the telephone of Morris. It would have been obvious to maintain a battery in the telephone of Morris because this would have allowed for using the telephone separately from the computer without having the also carry a battery pack for the telephone.

In regards to applicants argument that the combination of Sainton and Morris would not have a battery. Even though Sainton expressly teaches both the computer and telephone have a battery. "Not only the specific teachings of a reference but also reasonable inferences which the artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection." *In re Preda*, 401 F.2d 825, 159 USPQ 342 (CCPA 1968) and *In re Shepard* 319 F.2d 194, 138 USPQ 148 (CCPA 1963). Since Sainton expressly teaches the telephone having a battery, an artisan would have logically drawn that a battery could be included in the telephone.

"Furthermore, artisans must be presumed to know something about the art apart from what the references disclose." *In re Jacoby*, 309 F.2d 513, 135 USPQ 317 (CCPA 1962).

"The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference." *In re Bozek*, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969).

"Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein." *In re Bode*, 550 F.2d 656, 193 USPQ 12 (CCPA 1977).

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Thus since there is no reason why a battery cannot be added to the telephone of Morris, and since one of the references (Sainton) expressly teaches both the computer and the telephone having a battery, The examiner sees no reason why a person of ordinary skill in the art would not have been motivated to add a battery to the telephone of Morris. Or alternatively make a direct connection between the computer and telephone of Sainton.

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). references are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969.

The test of obviousness is:

"whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention," *In re Gorman*, 933 F.2d at 986, 18 USPQ 2d at 1888.

Subject matter is unpatentable under section 103 if it "'would have been obvious . . . to a person having ordinary skill in the art.' While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or prior art specifically suggest making the combination." *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ 2d 1500, 1502 (Fed. Cir. 1988).

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"Such suggestion or motivation to combine prior art teachings can derive solely from the existence of a teaching, which one of ordinary skill in the art would be presumed to know, and the use of that teaching to solve the same [or] similar problem which it addresses." *In re Wood*, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979).

"In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found *in* a specific reference."

Entire quote from *In re Oetiker*, 24 USPQ 2d 1443 (CAFC 1992).

Accordingly, it is not required to disclose or specifically suggest particular elements. Instead the measure is what the teachings would suggest to one of ordinary skill in the art, not what the art specifically suggests.

In regards to applicants argument that Sainton does not teach at least one command channel lead facilitates a bidirectional half duplex mode: Sainton teaches the command channel being a bidirectional half-duplex signal line (Column 13 lines 10-14).

In regards to applicants argument that Sainton does not teach its voice channel can be used for Data & Audio. Sainton teaches data on DIO/DATA line and audio on the TX/TXAF and possibly RX/SPK lines: Sainton teaches the RX/TX lines provides analog data transfer capability, and that "controller 204 may selectively deactivate data pump 208 and activate its first and fifth I/O ports to transfer data in serial digital form over the RX and TX lines of modem port 112. As a result, modem 110 of the present invention can be used with telephone systems which use analog data transmissions, such as public cellular radiotelephones, and also with systems using digital transmissions" (Column 11 lines 14-33).

In regards to applicants argument that Sainton does not teach a second voice channel lead: Sainton teaches said interface further including a first voice channel lead (RX/SPK) and a

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second voice channel lead (TX/TXAF) (Column 3 lines 64-65 Table 2 and Column 13 lines 10-16).

In regards to applicants argument that Sainton does not teach each of the voice channel leads facilitate a unidirectional full duplex mode: Sainton teaches RX in and TX out (See for example figure 1A) each are unidirectional and are used to facilitate full duplex communication. Full duplex is where you have two signal lines on in and one out allowing data to be transmitted and received at the same time, As opposed to half duplex which only allows one direction in or out at a time.

In regards to applicants argument even though Kyu teaches that it is well known to include both bidirectional half duplex and unidirectional full duplex. Kyu does not teach wherein said at least one voice channel lead facilitates a bidirectional half duplex mode: Sainton teaches the voice channel leads. Kyu teaches the well known features of both unidirectional full duplex (which takes 2 leads) and bidirectional half duplex (which takes only one lead). The rejection is Sainton in view of Morris and further in view of Kyu.

In regards to applicants that since Morris specifically requires that the battery in portable phone 38 be removed while portable phone 38 is connected to computer 22 thus there is no possibility of the battery being recharged: The rejection is Sainton in view of Morris. Sainton expressly teaches there being a battery in the portable telephone. Thus there is no problem with recharging the battery. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Kobayashi makes it clear that something can be placed entirely within a portable computer.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15, 17, 19, 22-23, 28, 30-44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090.

In regards to claims 15, 30, 38: Sainton teaches a computer (104) comprising: a provision for user input (keyboard); a provision for output (display); a microprocessor (106) coupled to said user input and said output; and an interface (110); coupled to said microprocessor (106), said interface being directly connectable to a corresponding interface (118) in a portable telephone (116), wherein said interface comprises at least one voice channel lead (RX/SPK), one

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command channel lead (DIO/DATA), and a ground/reference lead (GND) for connection to corresponding leads in a corresponding interface in said portable telephone. Sainton teaches a cable connection Sainton does not teach a connecting the computer to the telephone without a cable or tethered connection. Morris teaches a computer directly connected to a telephone without a cable or a tethered connection (Figure 2). It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a connection without a cable because this would have prevented having to also carry a cable for interconnection. Sainton also expressly teaches that both the computer and the radiotelephone have a battery.

In regards to claim 17: Sainton teaches the command channel being a bidirectional half-duplex signal line (Column 13 lines 10-14).

In regards to claims 19 and 28: Sainton teaches the voice channel used for Data/Audio (Column 12 line 50 to Column 13 line 16 . Sainton also indicates the audio is digitized voice (Column 11 lines 14-33).

In regards to claim 22: Sainton teaches said interface further including a second voice channel lead (TX/TXAF) (Column 3 lines 64-65 Table 2 and Column 13 lines 10-16).

In regards to claim 23: Sainton teaches the voice channel leads facilitating a unidirectional full duplex mode (While Sainton does not use the words unidirectional full duplex Sainton teaches two separate wires one input and one output RX and TX. Which are for receiving and transmitting data respectively Column 5 lines 59-60 and Column 10 lines 50-60 thus unidirectional and transmits and receives data thus full-duplex Column 17 lines 32-35)

In regards to claim 31: Sainton teaches a keyboard (Column 4 line 55 to Column 5 line 9).

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In regards to claim 32: Sainton teaches a display (Column 4 lines 55 to Column 5 line 9). The examiner further notes the telephone is a cellular telephone which would also include a keyboard and display.

In regards to claim 33, 36, 39, 42: Sainton teaches one apparatus being a computer (104).

In regards to claim 34, 35, 37, 40, 41: Sainton teaches one apparatus being a radio telephone (116).

In regards to claim 43: Sainton teaches the computer system attached to a cellular telephone as described above. Sainton does not expressly teach said interface is located within a cavity in said computer. Morris teaches a laptop computer including an interface (94) located within a cavity (mounting Track Figure 2) for holding a cellular telephone. It would have been obvious to a person of ordinary skill in the art at the time of the invention to include a cavity for holding the cellular telephone because this would have allowed for separability between the computer and the cell phone (See Morris Column 1 lines 30-36). Further, Sainton and Morris are in the same field of endeavor in that both references seek to provide mobile communications capability in a portable computer environment. Sainton also expressly teaches that both the computer and the radiotelephone have a battery.

In regards to claim 44: Morris teaches the portable telephone fits at least partially within said cavity.

In regards to claim 46: Morris teaches a mechanism on said computer (30) that cooperates with a corresponding mechanism (46) for removably securing said portable telephone to said computer (see figure 6).

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090 as applied to claim 15 above, and further in view of Kyu et al PN 4,225,919.

In regards to claim 16: Sainton teaches the voice channel being unidirectional full-duplex (With TX/TXAF being the second channel See figure 3) instead of bidirectional half-duplex. Kyu et al teaches two basic types of data links are well known, including both bidirectional half-duplex and unidirectional full-duplex (See figures 2A and 2B and Column 7 lines 39-42). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use bidirectional half-duplex because this would have decreased the number of required signal lines (As shown in Figure 2A with only 1 signal line and Figure 2B with 2 signal lines).

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090 as applied to claim 15 above, and further in view of Dent et al PN 5,581,597.

In regards to claim 18: Sainton teaches the interface described above. Sainton does not teach the interface including a power line. Dent et al teaches (Column 8 lines 52-57) a cellular terminal (such as a cellular telephone) that is powered by an external signal line while the cellular terminal is "parked". It would have been obvious to include a power signal line because this would have allowed for recharging the cell phone (Figure 3 battery charger 153).

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6. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090 as applied to claim 43 above and further in view of Kobayashi PN 5,111,361.

In regards to claim 45: Sainton in view of Morris teaches the computer with a cellular telephone housed within a cavity of the computer as described above. Morris does not expressly teach that the cellular telephone can fit completely within the cavity of the computer. Kobayashi teaches a notebook computer in which the battery pack (21) fits completely within a cavity for holding the battery pack (Flush with the surface). It would have been obvious to fit Morris's cellular telephone completely within the computer flush with the surface because this would have been aesthetically pleasing.

7. Claims 20-21 and 24-27 are allowed.

Conclusion

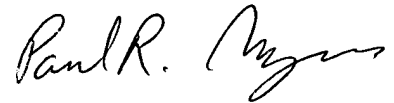
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 571 272 3639. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PRM
May 22, 2006

PAUL R. MYERS
PRIMARY EXAMINER